Lyman Welch, Clear water Director - Support SB 948, SCR16, SCR17, SR 150, SR 151

Alliance for the Great Lakes

Ensuring a Living Resource for all Generations

June 4, 2014

The Honorable Tom Casperson Chair Natural Resources, Environment and Great Lakes Committee 705 Farnum Building PO Box 30036 Lansing, MI 48909-7536

RE: Ontario Power Generation's Proposal for a Deep Geological Repository in Kincardine, Ontario

Dear Mr. Chairman and members of the committee:

Thank you for the opportunity to offer our perspective on Ontario Power Generation's (OPG) proposal for a deep geological repository (DGR) for low and intermediate level radioactive waste at the Bruce nuclear site, less than a mile from the shores of Lake Huron.

I write today on behalf of the Alliance for the Great Lakes and its more than 12,000 supporters committed to conserving and restoring the world's largest freshwater resource. As an advocate for a region that depends on clean water for our economy, health and quality of life, we take on the responsibility to assess projects that may put the lakes at long-term risk of harm.

We believe the proposed DGR could negatively impact the environmental and economic health of Lake Huron and its surrounding communities, and that there has been an inadequate exploration of alternatives to this site.

## **Potential Impacts and Safety Concerns**

OPG's analysis of the project's effects on Lake Huron¹ acknowledges the myriad species, habitats, and industries supported by the lake. Similarly, the written submission to the Joint Review Panel by the Ontario Ministry of the Environment² emphasizes its particular interest in how the proposed project may impact Ontarians' heavy reliance on the Great Lakes for drinking water, agriculture, manufacturing, transportation, recreation, and other essential activities. Michigan also heavily relies on the Great Lakes for these activities, and many residents are rightfully concerned with how the project will affect those resources. The project has the potential to be disruptive—potentially irreversibly so—to a body of water that supports millions of citizens, both in Canada and the United States.

OPG's proposal includes reliance on limestone to contain emissions from the stored nuclear waste. We have been unable to find a precedent for storage of radioactive waste material in limestone, and believe that OPG

<sup>2</sup> Hearing Document #1260.

<sup>&</sup>lt;sup>1</sup> OPG's Deep Geologic Repository Project for Low & Intermediate Level Waste: Protecting Lake Huron, available at http://www.opg.com/power/nuclear/waste/pdf/nwmo228-DGRLakeHuronReport.pdf.

should provide a full technical analysis of how the proposed storage environment will completely and permanently block migration of radionuclides. The acknowledgement by former OPG scientist Frank Greening that radioactivity of materials to be disposed of in the DGR has been underestimated gives us additional pause as to the site's ability to contain the waste safely. The assessment of safety must track the timeframe for which disposed materials will remain dangerously radioactive, which could extend to 100,000 years.

## **Lack of Alternatives**

Regardless of the theoretical and designed safety parameters of this specific proposal, we believe it is unwise to construct a DGR in this location – or any other - without seriously considering alternative sites. While the EIS includes general discussion regarding some alternative approaches, its failure to include information on specific alternative sites prevents informed and intelligent evaluation of possible alternatives, and instills little confidence that OPG's siting decision is a sound one based on all merits and risks that should be considered.

OPG's Environmental Impact Statement ("<u>EIS</u>") is required as part of the Environmental Assessment ("<u>EA</u>") that must be performed in order for OPG to receive the appropriate license from the Canadian Nuclear Safety Commission.<sup>3</sup> Canadian law requires that alternative means of carrying out a project must be considered as part of an EA.<sup>4</sup> Furthermore, the specific EIS Guidelines for the project require that OPG's EIS "identify and describe the alternative means to carry out the project that are...technically and economically feasible...[and] also describe the environmental effects of each alternative means." The EIS Guidelines also explicitly contemplate identification of siting alternatives as part of this required analysis.

OPG has acknowledged that once it identified Kincardine as a willing partner it "did not actively solicit other potential host communities or undertake geoscientific studies at other sites." Neither the EIS nor OPG's explanation to the Joint Review Panel reflects a substantive evaluation of identifiable alternative sites. The administrative ease of siting at DGR in one community should not be the determining factor that places radioactive waste near Lake Huron.

## Conclusion

We believe that unanswered questions remain around the safety and potential failure of the proposed DGR in limestone near Lake Huron. We also find that, regardless of the assessment of risk of this site, OPG should pursue a full evaluation of alternative sites and demonstrate by comparison whether or not this location is, in fact, the most environmentally sound location for such a facility. We have made these concerns known repeatedly to the Canadian government and the Joint Review Panel, and appreciate the opportunity to share them with the Michigan legislature today. Allow me to extend my sincere thanks for your interest in extending your oversight on this matter. If you have any questions or concerns regarding this letter, please do not hesitate to contact Lyman Welch, Clean Water Director, at 312-445-9739 or <a href="mailto:lwelch@greatlakes.org">lwelch@greatlakes.org</a>.

Sincerely, Lyman Welch, Clean Water Director

<sup>&</sup>lt;sup>3</sup> See Canadian Environmental Assessment Act, 2012, S.C. 2012, c. 19, s. 52 (CEAA).

<sup>&</sup>lt;sup>4</sup> CEAA, Sec. 19(g).

<sup>&</sup>lt;sup>5</sup> Guidelines for the Preparation of the Environmental Impact Statement for the Deep Geologic Repository for Low- and Intermediate-Level Radioactive Wastes, Sec. 7.3.

<sup>&</sup>lt;sup>6</sup> DGR Registry Document #523.